<u>CLAIMS</u>

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1. A magnetoresistive speed sensor (100) with a permanent magnet (10) and with a sensor (A, B) for a magnetic field for detecting the speed of an object rotating about an x-axis, wherein the magnetoresistive speed sensor (100) has a measuring direction (ME), characterized in that the measuring direction (ME) is aligned to be parallel with the x-direction, and two sensors (A, B) are disposed at a distance from one another and perpendicular to the measuring direction (ME).

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- 2. A magnetoresistive speed sensor as claimed in Claim 1, characterized in that the sensors (A, B) are disposed symmetrically in relation to the x-axis on the y-axis.
  - 3. A magnetoresistive speed sensor as claimed in Claim 1 or 2, characterized in that each of the sensors (A, B) is a Wheatstone bridge (11).
- 15 4. A magnetoresistive speed sensor as claimed in Claim 1 or 2, characterized in that each of the sensors (A, B) is a half bridge.
- 5. A magnetoresistive speed sensor as claimed in any one of Claims 1 to 4, characterized in that the permanent magnet (10) has a magnetic field component in the x-direction.
  - 6. A use of a magnetoresistive speed sensor (100) as claimed in any one of Claims 1 to 5 in automotive engineering, in particular for monitoring the speed of a crankshaft or camshaft, or in an ABS system.